AIR-WAY

TRADE MARK

Patented

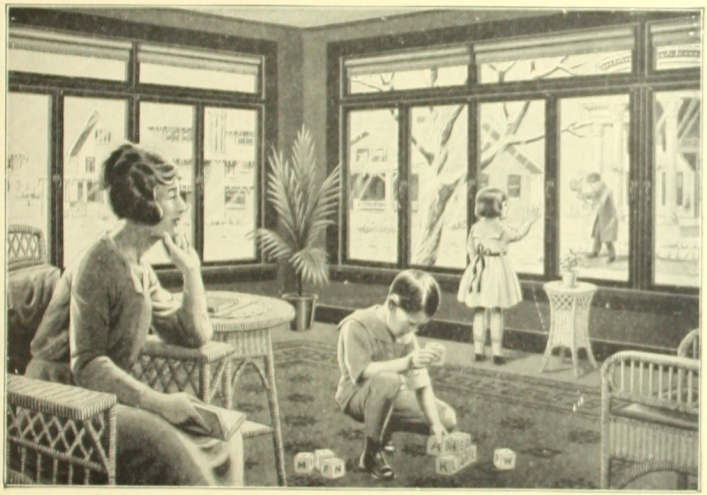


Fig. 1. A cheery sun parlor in winter, equipped with "AiR-Way" fixtures. Windows tight, glass area great, effect luxurious.

THE RIGHT IDEA IN CASEMENT WINDOW HARDWARE

RICHARDS WILCOX I&W AURORA ILL.

Richards-Wilcox Mfg. Co.

A Hanger for any Door that Slides

CHICAGO ST. LOUIS LOS ANGELES PHILADELPHIA — AURORA, ILLINOIS, U.S.A. — CLEVELAND INDIANAPOLIS LONDON, ONT. BOSTON NEW YORK MINNEAPOLIS SAN FRANCISCO

RICHARDS WILCOX I&W AURORA ILL.

WHAT adds more enjoyment to home life in winter than a finely appointed sun parlor? What gives a brighter, happier out-of-doors effect in the home, either winter or summer? Nothing—if the window conditions are right.

That's the point at which "AiR-Way" fixtures become interesting.

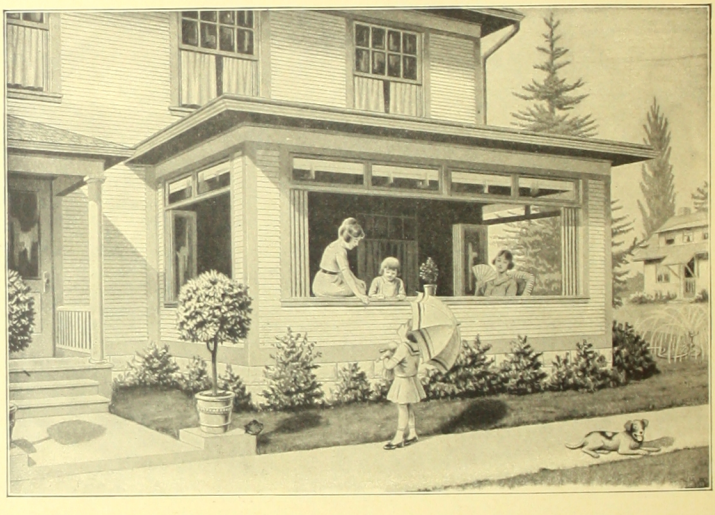


Fig. 2. A sun parlor in summer, "AiR-Way" equipped. Windows thrown wide open. No mullions nor other obstructions in opening.

AIRWAY

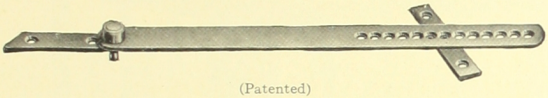
MULTIFOLD CASEMENT WINDOW HARDWARE

(R-W No. 312 - Patented)

makes possible all of the features desirable in window construction of the sun parlor, sleeping porch, bungalow—any multiple window which occupants of the building desire to open entirely. Affords perfect ventilation and light—closes weathertight, keeps out wind and storm.

BUILDERS of residences, hotels, hospitals, sanitariums, schools, libraries, clubs, apartments and flats use this style of windows extensively.

Makes it convenient to convert in-doors to out-doors and vice versa at a moment's notice.



(Patented)

Fig. 3. "AiR-Way" adjustable link.
One of these links fastens each sash, at the top and bottom, with the sash adjacent.

WINDOWS OPEN INSIDE BUILDING

Multifold windows operating on "AiR-Way" Casement Window Hardware open inside and do not interfere with screens, which may be applied to "AiR-Way" equipped casement windows in the same manner as to ordinary windows operating vertically. Wind and draught will not blow sash equipped with "AiR-Way" hardware, as they stand immovable in any position, open or closed, without locks or holders.

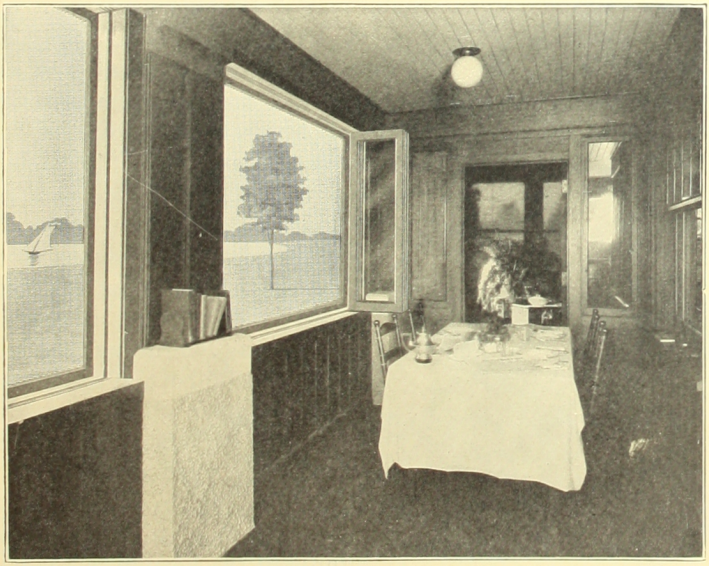


Fig. 4. Would breakfast in the cool atmosphere of this open porch appeal to you in summer? It is "AiR-Way" equipped. Screens applied outside in logical and convenient position.

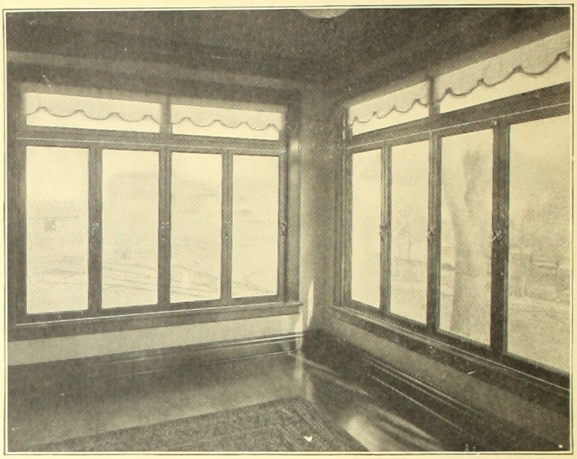


Fig. 5. Corner of sun parlor interior furnished with Multifold Casement Windows equipped with "AiR-Way" hardware. Windows closed tight.

STORM TIGHT

PLANS and details on pages 8-11 show how casing and sash should be constructed. To make the window storm-tight the vertical joints between sash are rabbetted, top of sash closes against stop and the storm sill is fitted close to bottom of sash with no projection to direct the water between sash and storm sill. The pressure of water striking the bottom of the sash is first obstructed by the storm sill which breaks up its force. The small amount of seepage which may fall through the joint between the bottom of the sash and the storm sill will run down into the air space behind the storm sill. From this space it is drained to the outside of the building by drain holes drilled through the bottom of the window frame.

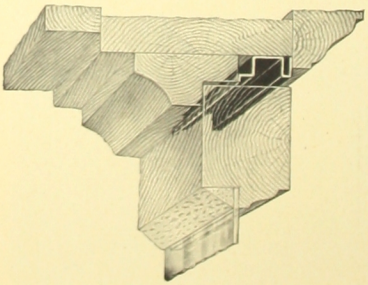


Fig. 6. Cross-section thru sash and window frame at top showing installation of "AiR-Way" track above sash and tight application of sash.

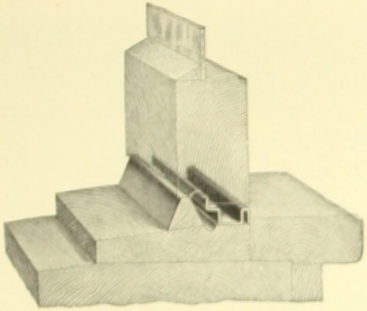


Fig. 7. Cross-section thru sash and window frame at bottom showing installation of "AIR-Way" track below sash and the tight application of sash. Note arched groove in bottom of sash just back of wood threshold, or storm sill—this groove obviates the possibility of moisture following the bottom of the sash.

THERE is no direct connection between the outside and the lower track and therefore there is no opportunity for water to get into the track or inside the building. The storm sill serves as the outside protection of a tight air space which keeps out the cold. The storm sill and the track both come up tight against the bottom of the sash. The fact that the windows open inside the building permits their being washed readily and removes danger and inconvenience connected with washing windows from outside the building. We will furnish metal storm sill, as illustrated (Fig. 8) to take the place of wooden sill, when desired. The metal threshold is furnished as an addition to the set of fixtures when wanted. Set prices on page 15 do not include this metal threshold.

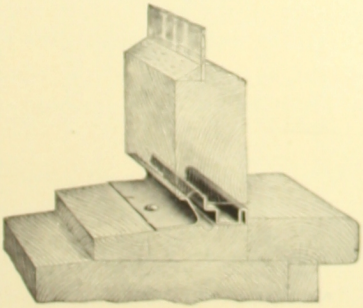


Fig. 8. Cross-section thru sash and window frame at bottom showing installation of "AIR-Way" track below sash and tight application of sash using special metal threshold or storm sill. Note arched groove in bottom of sash just back of threshold. This groove obviates the possibility of moisture following the bottom of the sash.

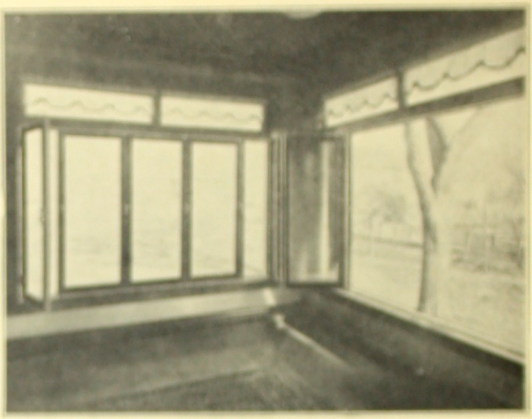


Fig. 9. Interior view of sun parlor "AIR-Way" equipped—front windows wide open, side window open at both ends.

CONVENIENCE OF VENTILATION

"AIR-WAY" Casement Window Hardware gives opportunity to throw open the entire window frame (See Fig. 9); or one sash at any particular point in the string of sash (See Fig. 11); or any number of sash desired. The windows may be placed in such a position that the wind will not blow directly into the room. The windows may be constructed with stationary mullion or moving split mullion, part of the sash moving to the right and part to the left; or they may be arranged to move all in one direction. When wide open the sash fold together at an angle against the casing at the edge of the window, leaving practically all of the window opening clear of obstruction.

"AIR-Way" hardware is applied to any number of sash the builder may want to place in a row, but we recommend that not more than 6 sash be installed to form a string sliding one way. Height of the window does not affect the operation of this hardware, but the hardware is designed for sash not more than 12 square feet in area and maximum width of sash not to exceed 24 inches. It is advisable to keep each opening within the limitation of a span 11 feet in width for windows having

transom sash when our standard design of transom bar is used, or 20 feet for windows having no transom sash and a total vertical sash height of six feet.

Spans can be kept down to this size conveniently by the use of solid mullions. Larger sash require special construction details. When transoms are installed shades may be fastened to transom sash; without transoms, American (Austrian) shading may be attached directly to each sash.

Sash and frames must be constructed to detail furnished by the Richards-Wilcox Manufacturing Company.

FOR SHOW WINDOW PARTITIONS

IT is interesting to note in one of our late installations, how attractively "AiR-Way" can be used for Show Windows. The sliding and swinging sash produce a pleasing effect, as well as making it very convenient for the window trimmer. The sash may be opened at any point, to enable him to conveniently reach his display or they may be thrown entirely open, when occasion requires a wide opening.

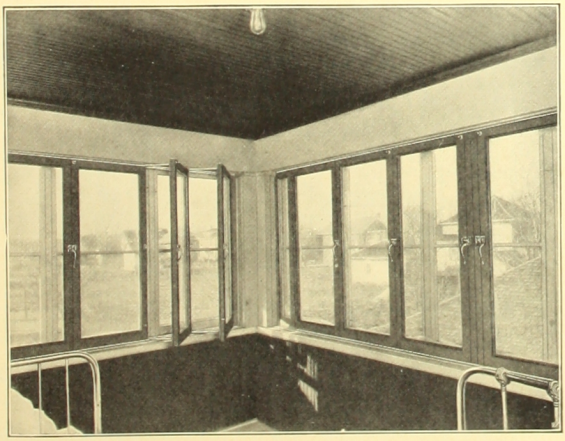
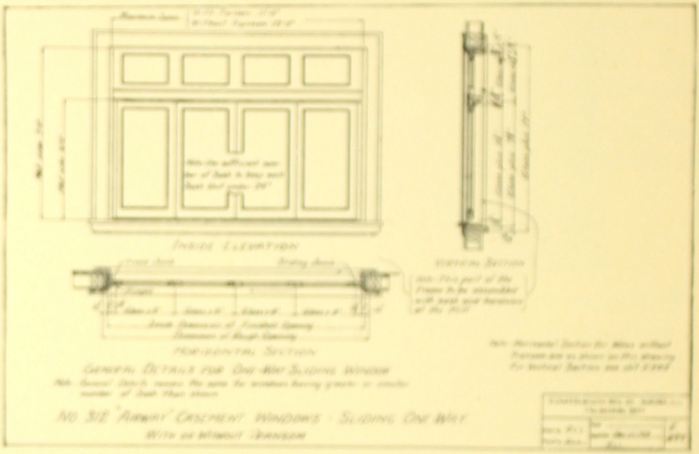


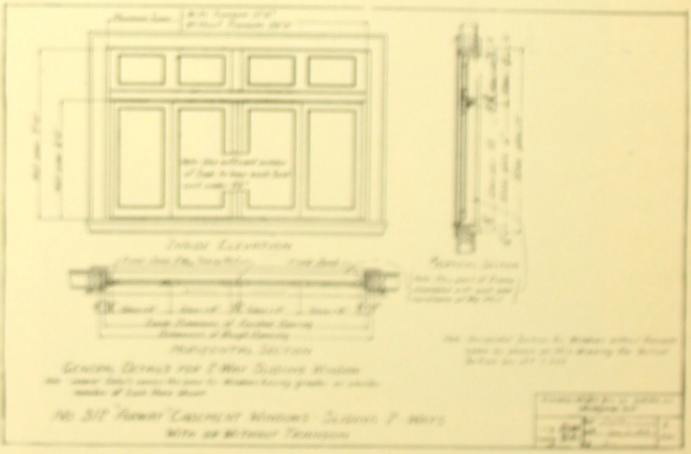
Fig. 10. Sleeping porch with casement windows equipped with "AiR-Way" Multifold Casement Window Hardware. All sash are closed except two which are open about 45 degrees. "AiR-Way" sash link can be plainly seen at the top and bottom of both these open sash. Note screens on these windows do not interfere with the operation of the "AiR-Way" equipped sash.

PLANS AN

Plans and details of casement windows equipped with R-W

It is essential to construct sa

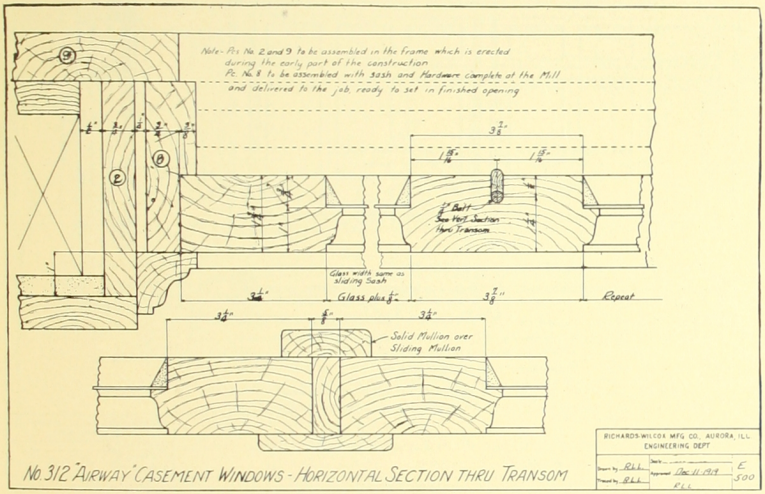




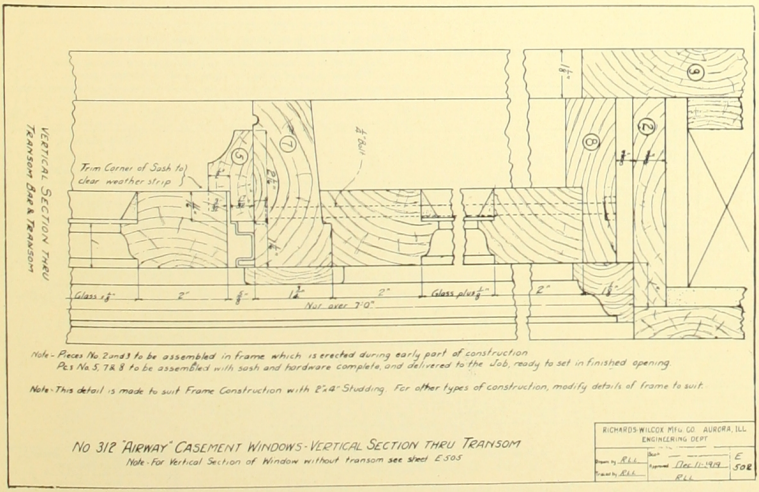
) DETAILS

No. 312 "AiR-Way" Multifold Casement Window Hardware.

h according to details shown.



NO. 312 "AIRWAY" CASEMENT WINDOWS - HORIZONTAL SECTION THRU TRANSOM

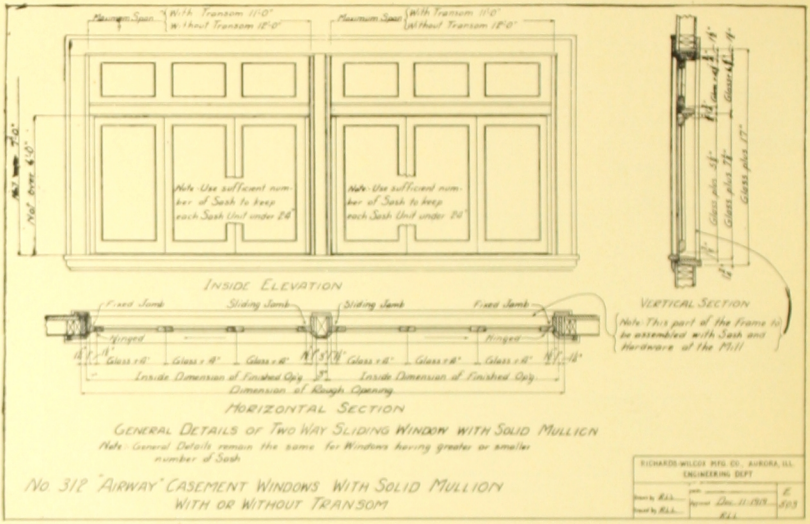


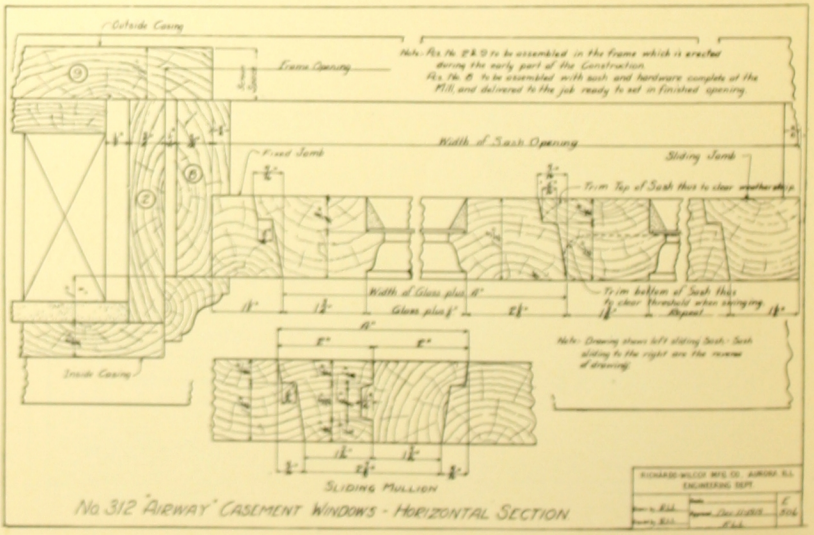
NO. 312 "AIRWAY" CASEMENT WINDOWS - VERTICAL SECTION THRU TRANSOM

Note - For Vertical Section of Window without transom see Sheet E 505

PLANS AND DETAILS

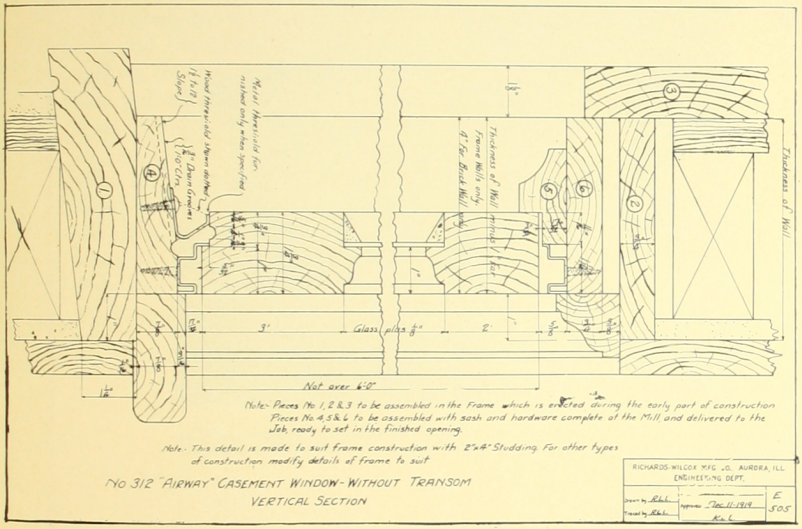
It is essential to construct sash according to details shown.

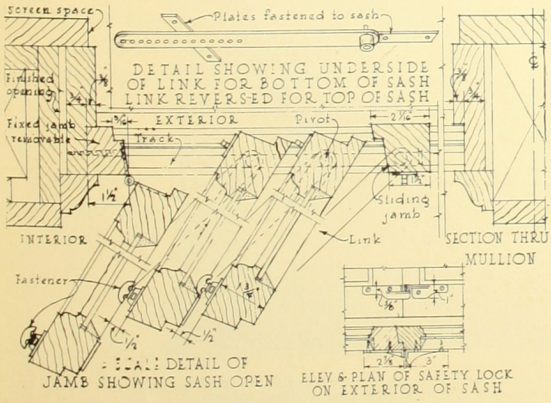


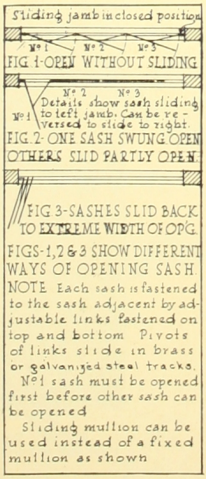


PLANS AND DETAILS

It is essential to construct sash according to details shown.







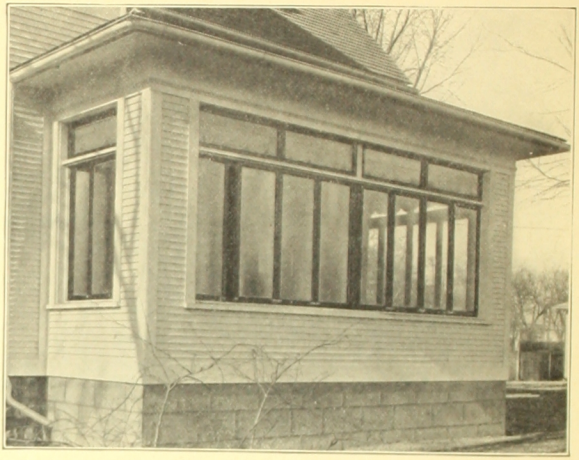


Fig. 11. Outside view of sun parlor shown on Figure 5. Windows closed except one sash of the side window and slight opening at the left end of the front window.

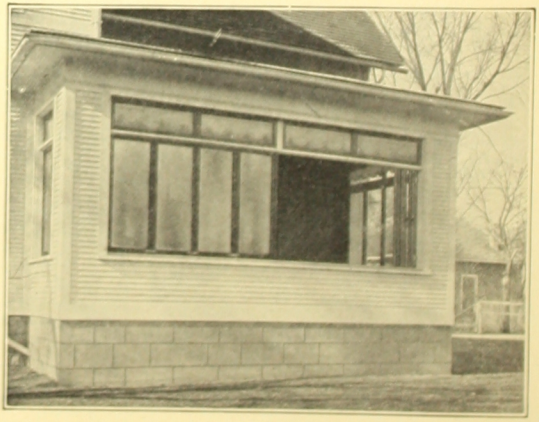


Fig. 12. Exterior of sun parlor shown in Figures 5, 9, and 11. Sash in right half of front window wide open. All other sash in closed position.

HARDWARE

THE appliance we furnish is fully protected by patents and consists of sash links (Fig. 18) which connect sash at top and bottom; metal tracks for top and bottom guides (Figs. 6 and 7); butts for sash adjacent to fixed jamb; a combination fastener and handle (Figs. 13 and 14) brass chafing plates (Fig. 15); rubber stops (Fig. 16) and safety locks (Fig. 17) for each sash. Two types of fasteners and handle are carried in stock, one with bow handle and one with finger grip. For high windows it is advisable to use two fasteners for each sash. In that case the bow handle may be used near the bottom and the finger grip type near the top.

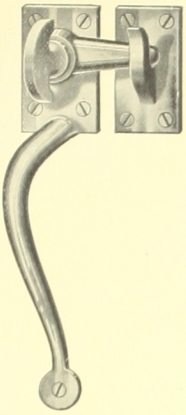


Fig. 13.
Fastener with
bow handle.

FINISH

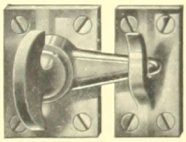


Fig. 14.
Finger Grip
Fastener.

FINISH No. 1.—Solid brass. Sash links and fasteners, brush brass finish. Safety locks, dull brass. Tracks, natural brass finish.

FINISH No. 2.—Sash links and fasteners plated, brush brass finish. Safety locks solid brass, dull brass finish. Tracks, electro-galvanized.

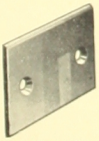


Fig. 15.
Chafing Plate.

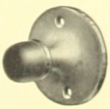
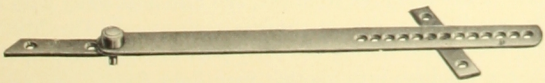


Fig. 16.
Rubber Stop.

FINISH No. 3.—Sash links, fasteners, safety locks, dull black imitation Bauer-Barrf finish. Tracks, electro-galvanized.

Fig. 17. Safety Lock.



(Patented)

Fig. 18. "AiR-Way" adjustable link.
One of these links fastens each sash, at the top and bottom,
with the sash adjacent.

COST

THE installation of "AiR-Way" Multifold Casement Window Hardware instead of costing more on account of the additional advantages it embodies over ordinary casement window hardware actually costs less. The saving of lumber and carpenter work alone more than offsets the cost of "AiR-Way" hardware.

SPECIFICATIONS

WE must have the following information in order to fill an order for "AiR-Way" Casement Window Hardware:

1. Total number of sliding sash in each window.
2. Height and width of each sash.
3. Do windows open both ways from the center of the opening or do all the windows open in the same direction from one side?
4. When sash fold to one side only, state whether they fold to right or to left as you face the window from the inside.
5. Finish of hardware wanted: No. 1 finish; No. 2 finish; No. 3 finish; No. 2 finish with solid brass track; No. 3 finish with solid brass track.
6. Finger grip fasteners or bow handle fasteners. For sash over 5′ high state whether two finger grip fasteners are wanted or one finger grip fastener and one bow handle fastener for each sash.

We furnish complete detail from which to construct sash and frame in accordance with builder's requirements. Special construction of sash makes it necessary to follow carefully details furnished by the Richards-Wilcox Mfg. Co.

Hardware is made for sash not over 24″ wide and not more than 12 square feet in area.

Competent carpenters successfully install casement windows trimmed with "AiR-Way" hardware.

MILL WORK

"AIR-WAY" Casement windows can be made and assembled complete with hardware, at the Mill, if desired. This relieves the builder of the responsibility of installing the windows, and also does away with the possibility of poor installations, due to careless carpenters. The Mill furnishes a frame which is installed during the early part of construction, as usual, and then builds the windows into another very light frame, and assembles with all hardware. When delivered to the job, it is simply necessary for the carpenter to set it in the finished opening, line it up and fasten.

PRICE LIST OF HARDWARE

PER SASH

HARDWARE	Finish No. 1	Finish No. 2	Finish No. 3	Finish No. 2 with solid brass track	Finish No. 3 with solid brass track
Sash Width up to 15″; Height up to 5′.					
Without fasteners	$5.60	$4.10	$3.10	$5.20	$4.20
Including 1 finger grip fastener	6.70	4.70	3.70	5.80	4.80
Including 1 bow handle fastener	7.80	5.80	4.80	6.90	5.90
Sash Width 15¼″ to 19½″; Height up to 5′.					
Without fasteners	6.20	4.30	3.30	5.60	4.60
Including 1 finger grip fastener	7.30	4.90	3.90	6.20	5.20
Including 1 bow handle fastener	8.40	6.00	5.00	7.30	6.30
Sash Width 19¾″ to 24″; Height up to 5′.					
Without fasteners	6.80	4.50	3.50	6.00	5.00
Including 1 finger grip fastener	7.90	5.10	4.10	6.60	5.60
Including 1 bow handle fastener	9.00	6.20	5.20	7.70	6.70
Sash Width up to 15″; Height 5′1″ to 6′.					
Without fasteners	6.40	4.90	3.90	6.00	5.00
Including 2 finger grip fasteners	8.60	6.20	5.20	7.30	6.30
Including 1 finger grip and 1 bow handle fastener	9.70	7.20	6.20	8.30	7.30
Sash Width 15¼″ to 19½″; Height 5′1″ to 6′.					
Without fasteners	7.00	5.10	4.10	6.40	5.40
Including 2 finger grip fasteners	9.20	6.40	5.40	7.70	6.70
Including 1 finger grip and 1 bow handle fastener	10.30	7.40	6.40	8.70	6.60
Sash Width 19¾″ to 24″; Height 5′1″ to 6′.					
Without fasteners	7.60	5.30	4.30	6.80	5.80
Including 2 finger grip fasteners	9.80	6.60	5.60	8.10	7.10
Including 1 finger grip and 1 bow handle fastener	10.90	7.60	6.60	9.10	8.10
Special steel storm threshold not included in above prices, per foot, $1.00. .30 Brass .60					
Butts not included in above prices, per pr	2.60	.60	.60		

Butts are required only for first sash adjoining jamb toward which windows fold in opening, and are not included in prices shown above. One pair recommended for sash up to 5 feet high. 1½ pair for sash 5 feet to 6 feet high.

One safety lock is furnished for each sash up to 5 feet high; two safety locks furnished for each sash 5 to 6 feet high.

PRICE LIST OF PARTS

		Finish No. 1	Finish No. 2	Finish No. 3
No. 312	Bow Handle fasteners, each	$3.00	$3.00	$2.00
No. 312	Finger Grip fasteners, each	1.80	1.10	.90
No. 312	Chafing Plates, each	.40	.30	.20
No. 312	Rubber Stops, each	.80	.60	.40
No. 312	Safety Locks, each	1.60	1.20	.80
No. 312	Sash Links, each	2.00	1.50	1.00
No. 312	Lower Track, per ft	(brass) $ .80	(Galv.) $ .25	
No. 312	Upper Track, per ft	(brass) $ .60	(Galv.) $ .20	

AIR-WAY

Patented

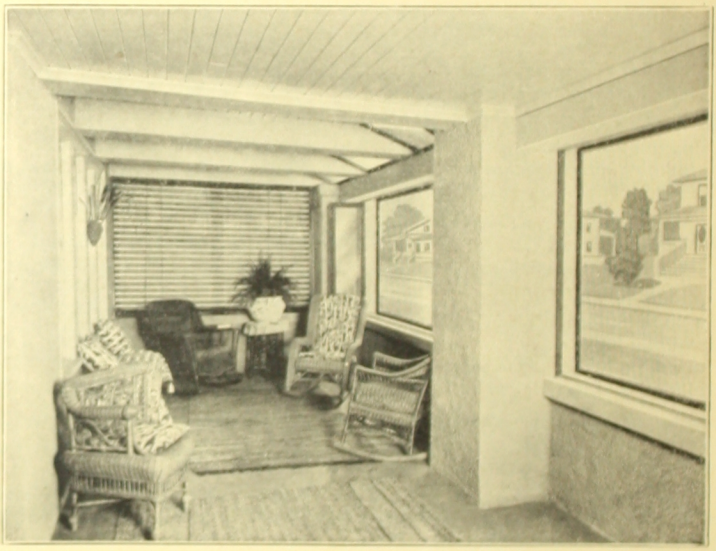


Fig. 19. Would a comfortable lounging porch make your home life more fascinating? This one is "AIR-Way" equipped. Note how easily the windows may be cleaned from the inside of porch.

THE RIGHT IDEA IN CASEMENT WINDOW HARDWARE

J. W. FRANKS & SONS, PEORIA, ILL.